

DISTRIBUTION OF UNIONIDÆ IN THE THREE RIVERS,
MAHONING, CUYAHOGA AND TUSCARAWAS.

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The table given below, while making no pretense to absolute accuracy, is a fair approximation of the distribution of Unionidæ in the three largest rivers and their tributaries in northeastern Ohio. Although they afford us no peculiar species, unless it be the *Unio Kirtlandiana* Lea of the Mahoning River, they still present some points of interest. The reader must bear in mind that species are not found equally distributed. Some may be found almost anywhere and others at only one place in a whole river. The Mahoning and Tuscarawas Rivers are tributaries of the Ohio; the first through the Beaver, the latter through the Muskingum. The Cuyahoga rises about thirty-five miles east of Cleveland and empties into Lake Erie at that city. Its course is southwest to within two or three miles of Akron from which it is almost due north to its mouth. Through this valley runs the Ohio canal, and this canal connects this river with the Tuscarawas by a rise that required sixteen locks, the whole distance between the two rivers being about six or seven miles. It will be seen by the following tabular statement that *Unio ligamentinus*, *rectus*, *rubiginosus* and others are common to the Tuscarawas and lower Cuyahoga, and entirely absent in the Mahoning and upper Cuyahoga. Above the connection of the Cuyahoga with the canal are several falls above which are found only five or six species, but below there the number is largely increased by those named above and a number of other Tuscarawas forms. The interesting question presented is, have these Tuscarawas forms been introduced through the canal during its fifty or sixty years of existence? A list of the forms found in streams that empty into Lake Erie, and have no connection by canal or otherwise with the Ohio, might throw some light upon the subject. In conclusion I will say that geographical distribution is of paramount importance to the conchologist and collector, and the least contribution to the limited knowledge of the subject we have at present ought to be welcomed.

Mahoning River,	Cuyahoga River,	Tuscarawas River.
	<i>Anodonta.</i>	
decora Lea,	.....	plana Lea?
subcylindracea Lea,	subcylindracea Lea,	subcylindracea Lea.
edentula Lea,	edentula Lea,	edentula Lea.
imbicilis Say (very rare),	?	?
pavonia Lea, Var.	pavonia Lea (typical) Above the falls.	pavonia Var.

Margaratana.

.....	.....	deltoidea Lea.
complanata Lea,	complanata Lea,	complanata Lea.
.....	(canal)	delhiscens Lea (rare).
Hildrethiana Lea,	.....	Hildrethiana Lea
(rare)		(rare).
marginata Say,	marginata Say,	marginata Say?
rugosa Barnes.	rugosa Barnes.	rugosa Barnes.

Unio.

.....	alatus Lea,	alatus? Lea.
circulus Lea,	circulus? Lea,	circulus Lea.
clavus Lam (common),	.....	clavus Lam (rare).
coccineus Lea,	coccineus Lea,	coccineus Lea.
cylindricus Say,	.....	cylindricus Say.
fabalis Lea,	.....	.....
gibbosus Barnes,	gibbosus Barnes,	gibbosus Barnes.
iris (rare),	.....	? ?
.....	.....	irroratus Lea.
.....	Novæboraci Lea,	Novæboraci Lea.
luteolus Lam.,	luteolus Lam.,	luteolus Lam (rare).
multiradiatus Lea,	multiradiatus Lea,	.....
.....	nasutus Say,	.....
occidens Lea,	occidens Lea (rare),	occidens (common)
(subovatus)		
parvus (reservoirs) Barnes,	parvus (reservoirs)	? ?
.....	.....	perplexus Lea (rare).
phaseolus Hild.,	? ?	? ?

pressus Lea,	pressus Lea,	pressus Lea.
.....	.....	pustulatus Lea (rare).
.....	.....	pustulosus Lea.
.....	.....	pyramidatus Lea.
rangianus Lea,	.....	rangianus Lea.
.....	rubiginosus Lea	rubiginosus Lea.
.....	(common),	(common).
.....	rectus Lam.,	rectus Lam.
Kirtlandiana Lea,	.....	? ?
.....	? ?	subrotundus Lea.
triangularis Lea,	.....	triangularis Lea.
tuberculatus Barnes,	.....	tuberculatus Barnes.
undulatus Barnes,	.....	undulatus Barnes.
verrucosus Barnes	.....	verrucosus Barnes
(rare). Very large.		(rare).

THE SHELL-BEARING MOLLUSCA OF RHODE ISLAND.

BY HORACE F. CARPENTER.

FAMILY UNIONIDÆ.

189.—*Unio radiatus*.

Syns.:

Mya radiata, Gm. Dill. Wood.

Mya oblonga, Wood.

Lampsilis radiata, Stimp. Morse.

Unio Virginiana, Lam.

Unio radiata, modern authors.

Shell transversely oblong-ovate, broader and angular behind; beaks nearer the anterior extremity; epidermis concentrically wrinkled, olivaceous with numerous lines of a greenish color radiating from the beaks to the margin; naere bluish-white, iridescent at the posterior portion, with flesh colored tints; cardinal teeth strong, erect, triangular pyramidal. Length 3 inches, height $1\frac{7}{10}$, breadth $1\frac{1}{2}$.

It inhabits ponds and rivers on the eastern slope of the Alleghanies and is quoted as being one of our most common species, but it is